PROJECT DESCRIPTION

<u>GENERAL</u>

THIS PORTION OF THE PROJECT INVOLVES THE MODIFICATION OF THE TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 2 (SOLOMONS ISLAND ROAD) AND MD 253 (MAYO ROAD) IN ANNE ARUNDEL COUNTY. IMPROVEMENTS ARE PROPOSED TO MD 253 AND THE ENTRANCE TO LEE AIRPORT (WEST LEG) TO SUPPORT THE DEVELOPMENT. VIDEO DETECTION IS PROPOSED FOR ALL PRESENCE DETECTION. ALL PROPOSED TRAFFIC SIGNAL HEADS WILL BE LED. MD 2 IS ASSUMED TO RUN IN AN NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC ACTUATED MODE. THE PEDESTRIAN PHASING WILL REMAIN. THE SIDE STREET PHASING WILL BE MODIFIED TO OPERATE CONCURRENTLY. THE QUEUE DETECTION WILL REMAIN. THE FIREHOUSE PRE-EMPTION WILL REMAIN.

CONTROLLER REQUIREMENTS

PHASE 1 AND 5

PHASE 1 AND 6

4 AND 8 ALT CHANGE

FLASHING

OPERATION

1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6

THE EXISTING GROUND MOUNTED CABINET AND CONTROLLER WITH REMAIN.

THE CONTACT PERSONS FOR DISTRICT #5/00TS ARE AS FOLLOWS: District #5

Ms.Kim Tran Assistant District Engineer - Traffic Phone: 410-841-1019

Mr. Mike Huber District Utility Engineer Phone: 410-841-1039

Mr. John Mays Assistant District Engineer - Maintenance Phone: 410-841-1013

Mr. James Folden Assistant District Engineer - Construction Phone: 410-841-1004

Office of Traffic & Safety

Mr. Richard L. Daff Sr. Chief, Traffic Operations Division Phone: 410-787-7630

Mr. Robert Snyder Assistant Division Chief, Traffic Operations Phone: 410-787-7630

Mr.Edward Rodenhizer Chief, SHA Traffic Signal Shop Phone: 410-787-7650

Mr. Eugene Bailey Chief, SHA Sign Operation 410-787-7670

12 13 14 15 16 17 18

R R R DW DW DW

R R/G→ DW DW DW DW

The Power Company Representative is: Baltimore Gas & Electric 1068 N. Front Street Baltimore, MD 21202 Phone: 1-800-265-6177

EQUIPMENT LIST 'A'

EQUIPMENT TO BE SUPPLIED BY THE SHA

CAT CODE **DESCRIPTION** <u>QUANTITY</u> NONE

EQUIPMENT LIST 'B' APPROVED SHA EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

CAT CODE	QUANTITY	DESCRIPTION
800000	ΙEΑ	VIDEO DETECTION CAMERA INTERFACE (I-4 CAMERAS)
800000	35 EA	LED VEHICULAR SIGNAL HEAD MODULE
800000	66 SF	FURNISH AND INSTALL SHEET ALUMINUM SIGNS - MAST ARM/POLE MOUNT
		EA - R3-5L (30"×36")
		3 EA - R3-5R (30"×36")
		EA - SHIELD ASSEMBLY (48"×75") "SOUTH, MD 253, LEFT ARROW"
		EA - SHIELD ASSEMBLY (30"x51") "SOUTH, MD 253, RIGHT ARROW"
816001	4 EA	VIDEO DETECTION CAMERA
816005	IEA	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
816010	2 EA	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
860284	9 EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION

WIRING DIAGRAM

A CONTROL CABLE, 250 FOOT, VIDEO DETECTION B CAMERA TO CONTROLLER	EPD - EXISTING PHONE DROP
C CONTROL CABLE, 500 FOOT, VIDEO DETECTION D CAMERA TO CONTROLLER	EPF - EXISTING POWER FEED
E ELECTRICAL CABLE, 2 CONDUCTOR (ALUMINUM SHIELDED)	LW - PROPOSED LOOP WIRE
F -ELECTRICAL CABLE, 2 CONDUCTOR (ALUMINUM SHIELDED)	ELW - EXISTING LOOP WIRE
T-USE EXISTING WIRING	

EQUIPMENT LIST 'C'

EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

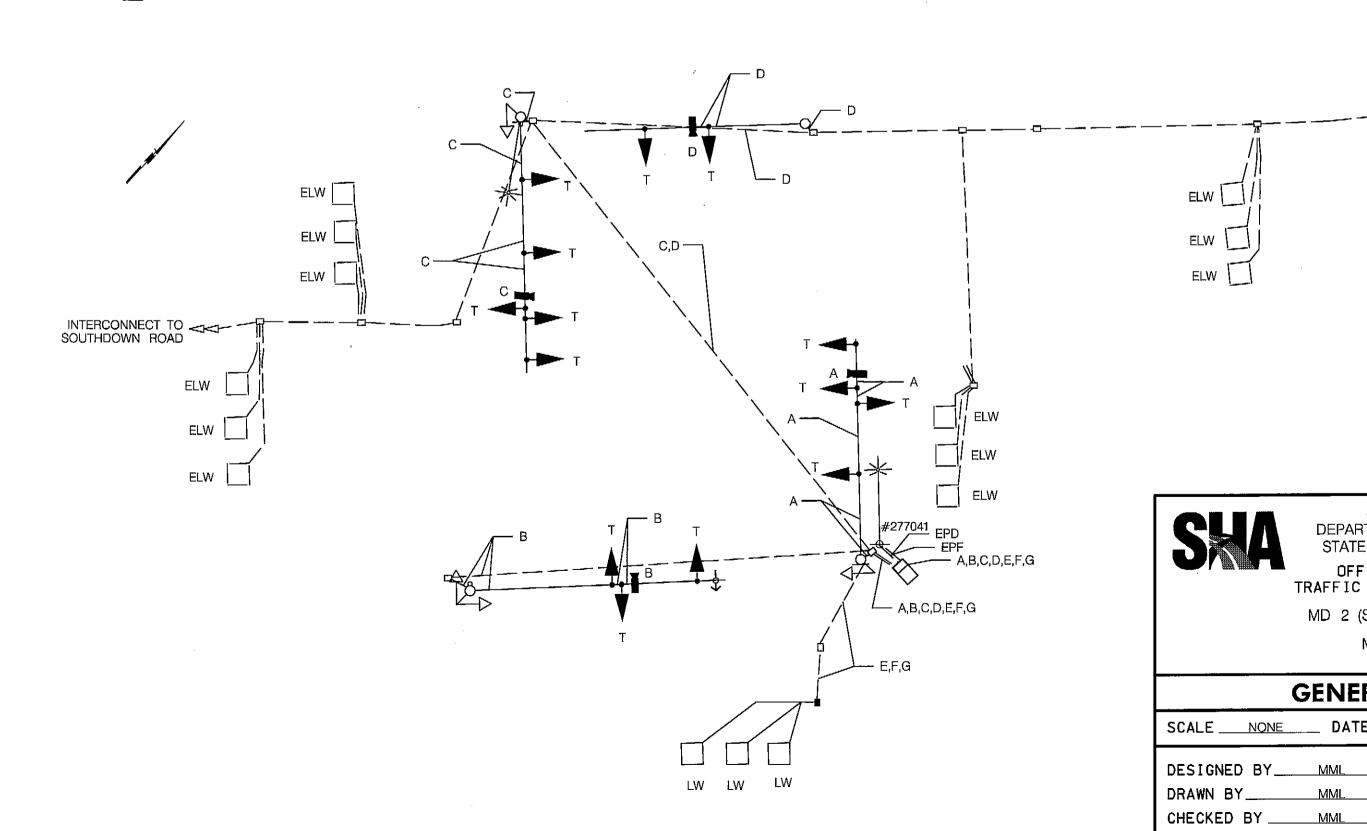
CAT CODE	QUANTITY	DESCRIPTION
120500	I LS	MAINTENANCE OF TRAFFIC
585462	20 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
585624	75 LF	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
800000	I LS	REMOVE AND DISPOSE EXISTING TRAFFIC SIGNAL EQUIPMENT
805160	30 LF	I INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
811011	I EA	ELECTRICAL HANDHOLE
813006	20 SF	RELOCATE SIGNS FROM EXISTING OVERHEAD STRUCTURE
822500	I EA	AS BUILT FOR SHA ON CADD
860265	3 EA	RELOCATE EXISTING SIGNAL HEAD
861104	450 LF	ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
862101	375 LF	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)

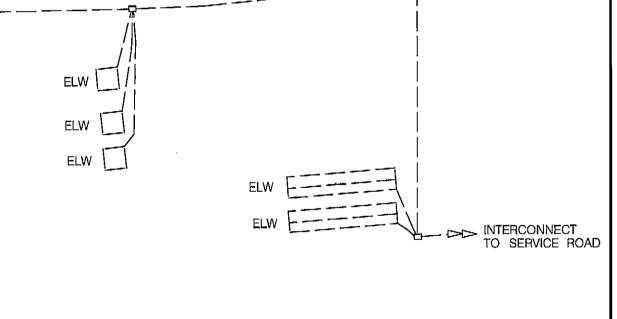
EQUIPMENT LIST_'D'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

CAT CODE QUANTITY DESCRIPTION

NONE - ALL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR







SCALE ____

DRAWING NO. TS-694-J-GI

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION

MD 2 (SOLOMONS ISLAND ROAD) AT MD 253 (MAYO ROAD)

GENERAL INFORMATION							
NONE		DATE	DECEMBER 2009	CONTRACT NO. BW996M82	_		

COUNTY ANNE ARUNDEL DESIGNED BY _____MML LOGMILE _ 02000217.21 DRAWN BY_ T.I.M.S. NO.___K010_ CHECKED BY TOD NO._ | F.A.P. NO.___

SHEET NO.

PLOTTED: WEDNESDAY, DECEMBER 09, 2009 AT 12:19 AM

1 CHANGE $| \leftarrow Y - | \leftarrow Y - | G | G | \leftarrow R - | \leftarrow R - | \leftarrow R - |$ PHASE 2 AND 5 | R | ←G—| ←G—| ←G— 5 CHANGE PHASE 2 AND 6 PED CLEARANCE | ←R-| ←R-| ←R-PHASE 2 AND 6 CHANGE PHASE 4 AND 8 DW | PHASE 4 AND 8 CHANGE PHASE 4 AND 8 ALT $R \mid \Phi R - \mid \Phi R - \mid \Phi R - \mid$ PED CLEARANCE | R | ←R−| ←R−| ←R−|

PHASE CHART

R Y G

 $|\leftarrow G-|\leftarrow G-|$ R | R $|\leftarrow G-|\leftarrow G-|\leftarrow G-|$ R

| ←G— | ←G--| G | G | ←R-| ←R-| ←R-|

RYG

(R)>(G)

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FIRE HOUSE PRE-EMPTION PRE-EMPTION $| \leftarrow R - | \leftarrow R - | R | R | \leftarrow R - | \leftarrow R - | \leftarrow R - |$ DW DW DW DW PHASE 4 PRE-EMPTION CLEARANCE PHASE 2 AND 6 DW | DW $\leftarrow R - | \leftarrow R - | G | G | \leftarrow R - | \leftarrow R$ NORMAL OPERATION \longrightarrow

|FL/&R-|FL/&R-| FL/Y | FL/Y |FL/&R-|FL/&R-|FL/Y | FL/Y | FL/R | FL/R | FL/R |FL/R |FL/R |DARK | DARK | DARK |

R | ←R−| ←R−| ←R−

LENHART TRAFFIC CONSULTING

THESE PLANS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF ONE (I) YEAR. SHOULD CONSTRUCTION NOT BEGIN WITHIN THIS TIME FRAME, THESE PLANS SHALL BE NULL AND VOID WITH A RE-REVIEW REQUIRED FROM THE TRAFFIC ENGINEERING DESIGN DIVISION.

331 Redwood Grove Court Millersville, Maryland 21108 Tel: (410) 987–3888 Fax: (443) 782–2288

TRAFFIC ENGINEERING & TRANSPORTATION PLANNING

EAPD PERMIT NO.